

OIPE

RAW SEQUENCE LISTING

DATE: 08/23/2001

PATENT APPLICATION: US/09/924,654

TIME: 14:28:43

Input Set : A:\PC0049CIPSEQLST.txt

Output Set: N:\CRF3\08162001\I924654.raw

ENTERED

2 <110> APPLICANT: Goold, Richard D.
 3 Akerblom, Ingrid E.
 4 Seilhamer, Jeffrey J.
 5 Coleman, Roger
 7 <120> TITLE OF INVENTION: TUMOR SUPPRESSOR
 9 <130> FILE REFERENCE: PC-0049 CIP
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/924,654
 C--> 12 <141> CURRENT FILING DATE: 2001-08-07
 14 <160> NUMBER OF SEQ ID NOS: 21
 15 <170> SOFTWARE: PERL Program
 17 <210> SEQ ID NO: 1
 18 <211> LENGTH: 373
 19 <212> TYPE: DNA
 20 <213> ORGANISM: Homo sapiens
 22 <220> FEATURE:
 23 <221> NAME/KEY: misc_feature
 24 <223> OTHER INFORMATION: Incyte ID No: PANC1A
 26 <220> FEATURE:
 27 <221> NAME/KEY: unsure
 28 <222> LOCATION: 20, 303, 340-341
 29 <223> OTHER INFORMATION: a, t, c, g, or other
 31 <400> SEQUENCE: 1
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 33 tcggttttag tgcgtgtctcc gcttttyttt caccttcaca gaggttcgtg tcttcctaaa 120
 34 agaaggtttt attgggagggt aaagggtcaat gcgtaggggt agagtaagat gtcttatggt 180
 35 gaaattraag gtaaattctt gggacctaga gaagaagtaa cgagttagcc acgctgtaaa 240
 36 aaattgaagt caaccacaga gtcgtatgtt tttcacaatc atagtaatgc tgattttcac 300
 W--> 37 agnatccaag agaaaactgg aaatgattgg gtcctgtgn ncatcattga tgtcagagga 360
 38 catagttatt tgc 373
 40 <210> SEQ ID NO: 2
 41 <211> LENGTH: 321
 42 <212> TYPE: DNA
 43 <213> ORGANISM: Homo sapiens
 45 <220> FEATURE:
 46 <221> NAME/KEY: misc_feature
 47 <223> OTHER INFORMATION: Incyte ID No: PANC1B
 49 <220> FEATURE:
 50 <221> NAME/KEY: unsure
 51 <222> LOCATION: 16, 277, 288, 309
 52 <223> OTHER INFORMATION: a, t, c, g, or other
 54 <400> SEQUENCE: 2
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 56 agtgcgtgtc cgmgttttct ttcaccttca cagagatgtc ttatggtgaa attgaaggta 120
 57 aattcttggg acctagwgaa gaagtaacga gtgagccacg ctgtaaaaaa ttgaagtcaa 180
 58 ccacagagtc gtatgttttt cacaatcata gtaatgctga ttttcacagw atccaagaga 240
 W--> 59 aaactggaaa tgatttgggt ccctgtgacc atcattnatg tcagaggnc a tagttaattt 300
 W--> 60 gcaggaganc aaaaatcaaa a 321

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62 <210> SEQ ID NO: 3
63 <211> LENGTH: 5035
64 <212> TYPE: DNA
65 <213> ORGANISM: Homo sapiens
67 <220> FEATURE:
68 <221> NAME/KEY: misc_feature
69 <223> OTHER INFORMATION: Incyte ID No: 496071CB1
71 <400> SEQUENCE: 3
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74 aaggtcaatg cgtaggggta gagtaagatg tcttatgggtg aaattgaagg taaattcttg 180
75 ggacctagag aagaagtaac gagtgagcca cgctgtaaaa aattgaagtc aaccacagag 240
76 tcgtatgttt ttcaacaatca tagtaatgct gattttcaca gaatccaaga gaaaactgga 300
77 aatgattggg tccctgtgac catcattgat gtcagaggac atagtatttt gcaggagaac 360
78 aaaatcaaaa ctacagattt gcatagacct ttgcatgatg agatgcctgg taatagacca 420
79 gatgttattg aatccattga ttcacaggtt ttacaggaag cacgtcctcc attagtatcc 480
80 gcagacgatg agatatatag cacaagtaaa gcatttatag gaccatttta caaacccct 540
81 gagaaaaaga aacgtaatga agggaggaat gaggcacatg ttctaaatgg tataaatgac 600
82 agaggaggac aaaaagagaa acagaaattt aactctgaaa aatcagagat tgacaatgaa 660
83 ttattccagt tttaaaaaga aattgaagag cttgaaaagg aaaaagatgg ttttgagaac 720
84 agttgtaaa aatctgaacc ttctcaggaa caatttggtc cattttatga gggtcataat 780
85 aatgggtctt taaaacctga tgaagaaaag aaagatctta gtaataaagc tatgccatca 840
86 cattgtgatt atcagcagaa cttggggaat gagccagaca aatatccctg taatggacaa 900
87 gtaataccta cattttgtga cacttcattt acttctttca ggctgaatg gcagtcagta 960
88 tatcctttta tagtgcccta tgggtccccc cttcccagtt tgaactatca tttaaacatt 1020
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90 cagatacaaa atggatatta tgtaataaat tgtcatgtta actggaattg catgactttt 1140
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97 ggtgatgcc atgactggaa ccagaacaga gcaaaacaag ctatcgatca gggaagatct 1560
98 ccagttataa tagataacac taatatacaa gcttgggaaa tgaagcata tgtggaagtg 1620
99 gccataggaa aaggatacag agtagagttt catgaacctg aaacttggtg gaaatttgat 1680
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102 cacaaaagca cacaaagacc tcctcctcca caggggagac agaggtgggg aggtctcttt 1860
103 ggctcacata atcgtgtctg tgtcacaat aatcattaaa ttagctattt tcagctaaca 1920
104 catttgttgt tgcacttgaa aaagagttag tgagcctgtc ttggagttaa agtagtttca 1980
105 aataaaaaaa ggctacagtg cctcacaaag gatgttccca gcaagttgtt taaattccca 2040
106 gcaagttgtt aaagtgtaaa taaaaatata tgaaattgta ttttaaatgt ttttatattc 2100
107 tcttgttgta atactcttgg ctgttatgga agcacctgag taatagagtg gtgggtaaga 2160
108 gctaagatgt ttttctacaa tcgaatttta aactaattta tctattttat agacactatt 2220
109 gaacagttt ttaatagttc atatctaaat ctaacttttc ataaaacttt acggtttttc 2280
110 cttcactacc ttaaatatgc aagaaatact cgaattggtat agggtaacct agttttctct 2340
111 attcattaga caggtaaaat tatatttcag ctgattgatc tgtgtgacaa aattatttct 2400
112 tagctataat cagcacatca cttagttcaa acaaaattcc ccagcaaatg ttagatagta 2460

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113 ggtatatcaa tcacctgggg agttttcttc ataatatgca tattcatctt gtaatgcata 2520
114 catagttatc atcctccttc tcaacccatc tccctaacc ccatgcttg ccagttcttg 2580
115 aagggataaa gtgattctaa taatgtttta cttctctctg ttcaatttaa tgtgatataa 2640
116 ttctagtata aaaatatttt ggacagttgc ttaacatggt cataagagga tttgtactat 2700
117 agaatatctt ctagtactaa tttttctgta gagcaaatta tttttctctc actggatagt 2760
118 ttttagatgt gtttcttcat ataaaattaa aaactgagat ggaattcatt tcagaggtct 2820
119 tgtcattcat cccctgcctt caaaccaagc ttacctaga ctaacctaga taattaagca 2880
120 tttctctttg caacatgagg aaaaaaacac tactacttct cttaatacca ttgttaccaa 2940
121 tgtcttctga agaataatttc ttcaacagtt ttgatttact tttttgattt actcttttta 3000
122 ggggaaaaaa aaccagcta attacaatgc tgtcttaaaa attagcatt atgattcttt 3060
123 atatgtttta cataatattt tgtggccttt aagctttctc ctaaaccagc acatcttgaa 3120
124 tcccatagta tttctttgtt ttaaaacctt ttgctattcc tttcaacttt agatattctc 3180
125 tcacatcttt atattacttt ttaagtgtc aggccaaaaa ctagattcac tgctatcaac 3240
126 aaggtctttg ttacattgcc ttttagtga taagaatatg attttatttg tactattcag 3300
127 tgcgttaaac atttgaatga atattacct tatctgttt aatacgtgtg tttgtatata 3360
128 tttgttcac ttaactacga tgaagaata tgctaattca tgttttgtgt gtaaagtgtat 3420
129 attgtataca tatacacatc ttcactatg ttttcatata ttcttttatt tcagagtaat 3480
130 acttggtggt gtttggaact gtgtttctaa gtattttatt ctgtagatta gcgcagtttg 3540
131 aaaattgtac aaaaggattt cttttggga cagggtgaaac aactcttagg tagactatat 3600
132 gtccctttct ttctgtctgt cttcataaac ttaggagtaa tagtactata aatttagctt 3660
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134 ggatcgctg aggtcaggag tttgagacca gcctgtctga ccggtgaaac cacatctcta 3780
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136 ggcagaggg ggggagtcgc ttgggcctgg gaggcggagt ttgcggtggg cagaggttgc 3900
137 gccacttgca ctccagcctg tgagacagag tgagactcct tctcaaaaaa aaaaattagt 3960
138 ttttttaaaa taacttttac atttattttt ggaaagtaaa gtattacctt tgggagaaac 4020
139 attatgagga aatatgtgca tattaagttt attttaattt ccagatttta ttatagactt 4080
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146 ggtcttgctt tgtttccag actggtcttg tactcctggc ctccaggtgat cctcccaaag 4500
147 tgcgtggatt acaggcattg gccactgcac cagctttagt gatttttttt tttttttttg 4560
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150 ttggaggcac tcgccaccat acctggataa tttttgtatt tttggtagag acagtgtttc 4740
151 accgtgttgg ccaggcaggt ctggaactcc tgaccccagg tgatccgcct gccttggcct 4800
152 cccaaagtgc tgggtgggat tacaggcatg agccaccaca ccaggcctag ttggtttttt 4860
153 taaagtggaa aaacagttgt tttcctaaac attgtggcta attttaatta aaaacagaat 4920
154 ggaggaatga atatgcagt gaaatactaa aatcactgtt taaagtcatt gcttggtgtt 4980
155 taaaaatcta taaaaatgtg aaatttaaaa aaaaaaaaaa aaaaaaa 5035
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158 <211> LENGTH: 583
159 <212> TYPE: PRT
160 <213> ORGANISM: Homo sapiens
162 <220> FEATURE:
163 <221> NAME/KEY: misc_feature

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164 <223> OTHER INFORMATION: Incyte ID No: 496071CD1
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170 20 25 30
171 Glu Ser Tyr Val Phe His Asn His Ser Asn Ala Asp Phe His Arg
172 35 40 45
173 Ile Gln Glu Lys Thr Gly Asn Asp Trp Val Pro Val Thr Ile Ile
174 50 55 60
175 Asp Val Arg Gly His Ser Tyr Leu Gln Glu Asn Lys Ile Lys Thr
176 65 70 75
177 Thr Asp Leu His Arg Pro Leu His Asp Glu Met Pro Gly Asn Arg
178 80 85 90
179 Pro Asp Val Ile Glu Ser Ile Asp Ser Gln Val Leu Gln Glu Ala
180 95 100 105
181 Arg Pro Pro Leu Val Ser Ala Asp Asp Glu Ile Tyr Ser Thr Ser
182 110 115 120
183 Lys Ala Phe Ile Gly Pro Ile Tyr Lys Pro Pro Glu Lys Lys Lys
184 125 130 135
185 Arg Asn Glu Gly Arg Asn Glu Ala His Val Leu Asn Gly Ile Asn
186 140 145 150
187 Asp Arg Gly Gly Gln Lys Glu Lys Gln Lys Phe Asn Ser Glu Lys
188 155 160 165
189 Ser Glu Ile Asp Asn Glu Leu Phe Gln Phe Tyr Lys Glu Ile Glu
190 170 175 180
191 Glu Leu Glu Lys Glu Lys Asp Gly Phe Glu Asn Ser Cys Lys Glu
192 185 190 195
193 Ser Glu Pro Ser Gln Glu Gln Phe Val Pro Phe Tyr Glu Gly His
194 200 205 210
195 Asn Asn Gly Leu Leu Lys Pro Asp Glu Glu Lys Lys Asp Leu Ser
196 215 220 225
197 Asn Lys Ala Met Pro Ser His Cys Asp Tyr Gln Gln Asn Leu Gly
198 230 235 240
199 Asn Glu Pro Asp Lys Tyr Pro Cys Asn Gly Gln Val Ile Pro Thr
200 245 250 255
201 Phe Cys Asp Thr Ser Phe Thr Ser Phe Arg Pro Glu Trp Gln Ser
202 260 265 270
203 Val Tyr Pro Phe Ile Val Pro Tyr Gly Pro Pro Leu Pro Ser Leu
204 275 280 285
205 Asn Tyr His Leu Asn Ile Gln Arg Phe Ser Gly Pro Pro Asn Pro
206 290 295 300
207 Pro Ser Asn Ile Phe Gln Ala Gln Asp Asp Ser Gln Ile Gln Asn
208 305 310 315
209 Gly Tyr Tyr Val Asn Asn Cys His Val Asn Trp Asn Cys Met Thr
210 320 325 330
211 Phe Asp Gln Asn Asn Glu Tyr Thr Asp Cys Ser Glu Asn Arg Ser
212 335 340 345
213 Ser Val His Pro Ser Gly Asn Gly Cys Ser Met Gln Asp Arg Tyr

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```

214          350          355          360
215 Val Ser Asn Gly Phe Cys Glu Val Arg Glu Arg Cys Trp Lys Asp
216          365          370          375
217 His Cys Met Asp Lys His Asn Gly Thr Asp Arg Phe Val Asn Gln
218          380          385          390
219 Gln Phe Gln Glu Glu Lys Leu Asn Lys Leu Gln Lys Leu Leu Ile
220          395          400          405
221 Leu Leu Arg Gly Leu Pro Gly Ser Gly Lys Thr Thr Leu Ser Arg
222          410          415          420
223 Ile Leu Leu Gly Gln Asn Arg Asp Gly Ile Val Phe Ser Thr Asp
224          425          430          435
225 Asp Tyr Phe His His Gln Asp Gly Tyr Arg Tyr Asn Val Asn Gln
226          440          445          450
227 Leu Gly Asp Ala His Asp Trp Asn Gln Asn Arg Ala Lys Gln Ala
228          455          460          465
229 Ile Asp Gln Gly Arg Ser Pro Val Ile Ile Asp Asn Thr Asn Ile
230          470          475          480
231 Gln Ala Trp Glu Met Lys Pro Tyr Val Glu Val Ala Ile Gly Lys
232          485          490          495
233 Gly Tyr Arg Val Glu Phe His Glu Pro Glu Thr Trp Trp Lys Phe
234          500          505          510
235 Asp Pro Glu Glu Leu Glu Lys Arg Asn Lys His Gly Val Ser Arg
236          515          520          525
237 Lys Lys Ile Ala Gln Met Leu Asp Arg Tyr Glu Tyr Gln Met Ser
238          530          535          540
239 Ile Ser Ile Val Met Asn Ser Val Glu Pro Ser His Lys Ser Thr
240          545          550          555
241 Gln Arg Pro Pro Pro Pro Gln Gly Arg Gln Arg Trp Gly Gly Ser
242          560          565          570
243 Leu Gly Ser His Asn Arg Val Cys Val Thr Asn Asn His
244          575          580
246 <210> SEQ ID NO: 5
247 <211> LENGTH: 359
248 <212> TYPE: DNA
249 <213> ORGANISM: Homo sapiens
251 <220> FEATURE:
252 <221> NAME/KEY: misc_feature
253 <223> OTHER INFORMATION: Incyte ID No: 071178.assembled
255 <220> FEATURE:
256 <221> NAME/KEY: unsure
257 <222> LOCATION: 20, 303, 340-341
258 <223> OTHER INFORMATION: a, t, c, g, or other
260 <400> SEQUENCE: 5
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263 agaaggtttt attgggaggt aaaggtcaat gcgtaggggt agagtaagat gtcttatggt 180
264 gaaattraag gtaaattcct gggacctaga gaagaagtaa cgagtgaacc acgctgtaaa 240
265 aaattgaagt caaccacaga gtcgtatgtt tttcacaatc atagtaatgc tgattttcac 300
W--> 266 agnatccaag agaaaactgg aaatgattgg gtccctgtgn ncatcattga tgtcagagg 359

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Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

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Input Set : A:\PC0049CIPSEQLIST.txt

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L:1 M:270 C: Current Application Number differs, Replaced Current Application Number
L:2 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:32 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:37 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:59 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:60 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:283 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:306 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:307 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:325 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:475 M:283 W: Missing Blank Line separator, <220> field identifier OK
L:543 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18